



SRINGFIELD, MISSOURI

Decision Support Newsletter

Winter 2013-2014

NOVEMBER, 2013

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Short Term Forecast Enhancements Continue



Heavy snow behind the NWS Office during the Feb., 2011 blizzard

Forecasters at the National Weather Service Office in Springfield will continue to focus on improving the accuracy and utility of the short term forecast this winter, in an effort to better serve our core partners and decision makers. The short term forecast, generally covering the upcoming 24 hours, is one of the most critical time periods for decision making for many National Weather Service customers, ranging from Departments of Transportation to Emergency Management to local school districts.

Increased Detail

Improvements in technology, weather model resolution, and

the understanding of small scale meteorology now allow forecasters to provide far more detail in the short term than what was previously possible. While every storm system is unique, in many cases forecasters can now provide detail down to the hour for probability of precipitation (PoP), precipitation type, temperature, and other weather elements. This high-resolution forecast can be refined as a storm system begins to move into the area, with meteorologists utilizing a combination of radar, satellite, and ground observations, along with high resolution computer models, to create a detailed forecast of when precipitation is expected to begin, end, and any changes in precipitation type along the way.

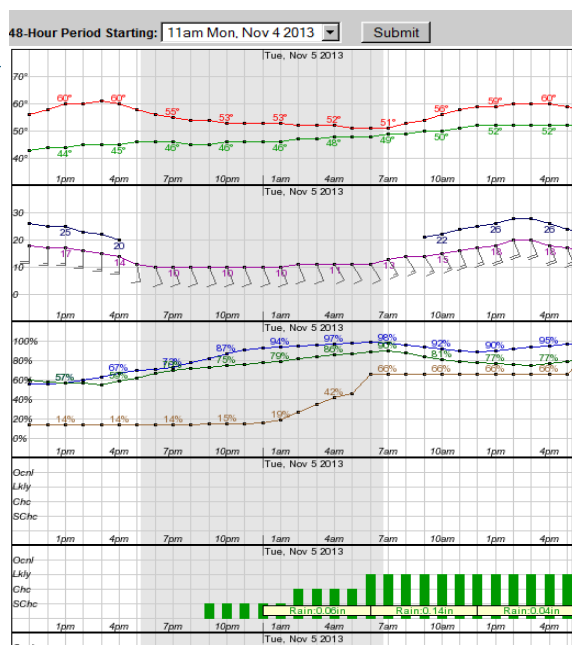
More Frequent Updates

Along with a more detailed forecast, a major goal for the National Weather Service is to provide more frequent forecast updates for our partners and customers. Many years ago, the forecast may have only been updated a handful of times per day. While this may have worked well during periods of quiet weather, the forecast oftentimes became stale quite quickly during active weather. Since the time leading up to and during a winter storm is the most critical for National Weather Service customers, it only makes sense for forecasters to devote as many resources as possible to keeping the short term forecast fresh and up-to-date. Today, customers and partners can expect to see the short term forecast updated every few hours, if not every hour during significant weather events. Because of these more frequent updates, we encourage our customers to always check back often for the very latest forecast information. Page two of this newsletter details a few of the information resources where partners and customers can expect to see these forecast enhancements reflected.

Hourly Weather Graph

Hourly Weather Graphs and tables are available from the point and click map on the NWS Springfield home page. Hourly elements include temperature, wind, wind chill, probability of precipitation, sky cover, and precipitation accumulation. During periods of active weather, customers can expect to see this graph updated at least once every few hours.

To access, visit www.weather.gov/springfield and click your location of interest on the map. The hourly weather graph will then be on the bottom right of the following webpage.



The National Weather Service provides weather, hydrologic, and climate forecasts and warnings for the United States, its territories, adjacent waters and ocean areas, for the protection of life and property and the enhancement of the national economy.

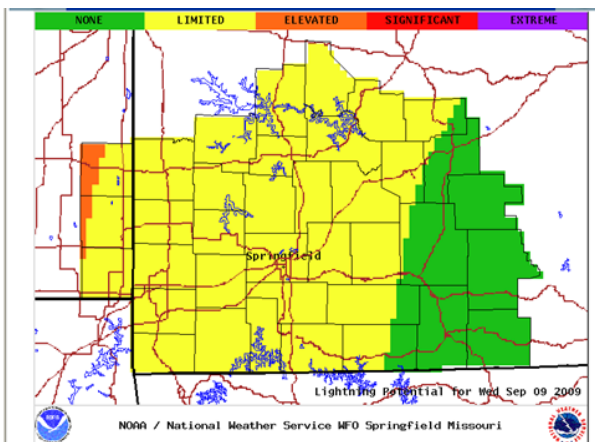
Enhanced Hazardous Weather Outlook

The Enhanced Hazardous Weather Outlook (EHWO) can be used as a decision support tool prior to and during winter weather events to support preparedness and response efforts. The EHWO provides a graphical depiction of weather hazards through the next seven days. The EHWO packages five-level, color coded alert buttons and text within a comprehensive web page suite. This information is updated on a regular basis during hazardous weather.

<http://www.crh.noaa.gov/sgf/?n=hwo>

EHWO Snow & Sleet Risk Level Definitions

Risk Level	Definition
None	No snow or sleet.
Limited	Snow and/or sleet with <u>less than 1 inch of accumulation</u> expected.
Elevated	Snow and/or sleet with <u>1 to 5.9 inches of accumulation</u> expected.
Significant	Snow and/or sleet with <u>6 to 11.9 inches of accumulation</u> expected.
Extreme	Snow and/or sleet with <u>greater than or equal to 12 inches of accumulation</u> expected.



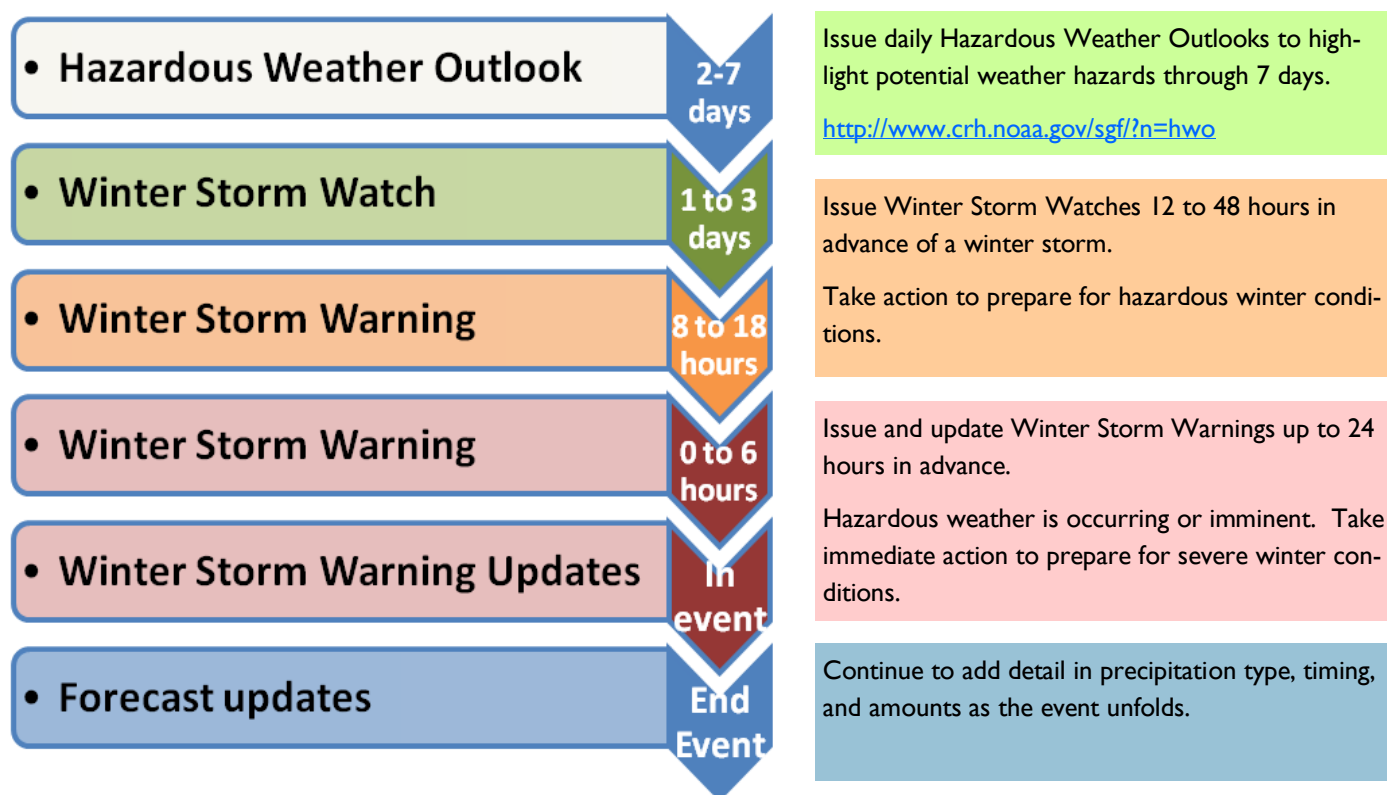
EHWO Freezing Rain Risk Level Definitions

Risk Level	Definition
None	No freezing rain or drizzle.
Limited	Very light freezing rain or drizzle with <u>no accumulation</u> .
Elevated	Freezing rain or drizzle with <u>accumulation less than 1/4 inch</u> .
Significant	Freezing rain with <u>accumulation of 1/4 inch to less than 1 inch</u> .
Extreme	Freezing rain with <u>accumulation of greater than or equal to 1 inch</u> .

Winter Weather Products

The Springfield National Weather Service Office has forecast and warning responsibility for 34 counties in southwestern Missouri and 3 counties in extreme southeastern Kansas. Winter-specific products issued by the NWS include Winter Storm Watches and Warnings, Ice Storm Warnings, and Winter Weather Advisories.

Winter weather products are issued following a “Ready”-“Set”-“Go” concept as the event approaches and confidence in occurrence increases.



Warnings and advisories are issued for expected or occurring winter weather conditions meeting a specific criteria.

Winter Storm Watches

Issued for the possibility of severe winter conditions meeting warning criteria in the next 18 to 48 hours.

- Heavy snow accumulations of $\geq 6''$
- Sleet accumulations $\geq 1/2''$
- Combination of significant snow ($\geq 3''$) & ice accumulations ($\geq 1/8''$)

Winter Storm Warnings

Issued when severe weather conditions are expected within 18 to 24 hours.

- Heavy snow accumulations of $\geq 6''$
- Sleet accumulations $\geq 1/2''$
- Combination of significant snow ($\geq 3''$) & ice accumulations ($\geq 1/8''$)

Ice Storm Warning are issued for ice accumulations from freezing rain $\geq 1/4''$.

Winter Weather Advisories

Issued for less significant accumulations of snow and ice to occur within 18 to 24 hours that can be hazardous if proper precautions are not taken.

- Snow accumulations $\leq 5''$
- Combination of snow and ice ($\leq 3''$ and minor ice accumulations)



Core partners can collaborate directly with NWS forecasters utilizing NWSChat. NWSChat is an Instant Messaging program utilized by NWS operational personnel to share critical warning decision expertise and other types of significant weather information essential to the NWS's mission of saving lives and property. This information is exchanged in real-time with the media and emergency response community, who in turn play a key role in communicating the NWS's hazardous weather messages to the public. NWSChat is monitored and utilized by on-duty NWS forecast staff 24 hours a day, 7 days a week. During particularly significant hazardous weather events, one or more staff members are often given specific responsibility for NWSChat, answering questions and providing core partners with the very latest information. If you are not yet a part of NWSChat, please visit the website below to request an account.

Information & Instructions - <https://nwschat.weather.gov/>

Partner Account Request - <https://nwschat.weather.gov/create.php>

NWSChat Live Web Interface - <https://nwschat.weather.gov/live/>

National Weather Service Forecast Office

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Springfield, MO 65802

Forecast: 417-869-4491

Business: 417-863-8028

The mission of the National Weather Service, part of the National Oceanic and Atmospheric Administration and Department of Commerce, is to issue weather, water, and climate forecasts and warnings for the protection of life and property and enhancement of the National economy. This mission is carried out by the dedicated men and women at 122 Weather Forecast Offices around the United



States.

The Springfield National Weather Service Forecast Office has 24 hours a day, 7 days a week forecast and severe weather warning responsibility for 37 counties in southern and southwestern Missouri and extreme eastern Kansas. In addition, specialized forecasts are issued for aviation interests at the Springfield, Branson, and Joplin airports. The office is also one of 92 stations with responsibility for twice a day weather balloon observations.

More information on the Springfield, MO Forecast Office, as well as local forecast information, can be found on our website, **www.weather.gov/springfield**. Information on other Forecast Offices around the country, as well as forecasts across the United States, can be found at **www.weather.gov**.

